

NET ZERO AND THE THREAT TO HUMAN LIBERTY

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Executive summary

In this paper, *Net Zero and the Threat to Human Liberty*, Rt Hon Steve Baker FRSA argues that current decarbonisation efforts rely excessively on top-down mandates and central planning. These approaches undermine personal freedom, erode economic prosperity and ultimately fail to achieve affordable environmental benefits with public consent. Drawing on historical precedents in planned societies and insights from classical liberal scholars, the paper demonstrates how heavy-handed climate policies reproduce the same mistakes that doomed socialist economies: inefficiency, stagnation and authoritarianism.

The paper begins by illustrating the scope of Net Zero policy: wide-ranging directives covering energy generation, transport, housing, agriculture, waste management and even personal lifestyle choices. It shows that these measures often lead to impractical infrastructure demands, higher costs for households and intrusive interference in daily life. The author underscores the importance of liberty, explaining how individual freedom – protected by the rule of law, autonomy and decentralized governance – underpins not only economic flourishing but also moral agency and authentic community bonds.

Highlighting the fatal conceit of knowledge in central planning, the paper contends that state-led revolutions in the name of Net Zero inevitably misallocate resources and fail. Real-world consequences include energy shortages, high and volatile prices and limits on personal autonomy. Drawing upon works by the Global Warming Policy Foundation, Bjorn Lomborg and Michael Shellenberger, the paper advocates market-based incentives that align carbon reductions with entrepreneurial discovery, moderate carbon pricing and transparent cost-benefit analysis – all designed to spur technologies without crippling economic growth or personal choice.

Finally, the author outlines a better way: harnessing voluntary cooperation, local experimentation and innovation through competition on the merits. Civil society can help shift norms without the heavy hand of regulation. By preserving individual liberty, we can foster the creativity and technological breakthroughs necessary for meaningful, enduring progress, ensuring abundant energy and a flourishing society.



Introduction

'The grid is going to be a very different system in 2020, 2030. We keep thinking that we want it to be there and provide power when we need it...Families will have to get used to only using power when it [is] available, rather than constantly.'

– former National Grid CEO Steve Holliday¹

Sometimes a moment is of such importance that when you discover it in retrospect, you wonder how you could possibly have missed it and passed over its significance. The words of then National Grid CEO Steve Holliday in advance of his speech to the Royal Academy of Engineering in March 2011 provide one such event.² In his speech, he said, 'The way that we produce energy today and consume energy today, is not sustainable.'³ He did not go on to set out in detail what managing demand for energy would mean. Ten years later, a paper by Andrew Montford for the Global Warming Policy Foundation elaborated the policy for energy rationing in a paper entitled, *Survival of the Richest*.⁴

The issue is twofold: there is a limit to what can be generated by a given system and there is a limit to what a given infrastructure can transmit. National Grid – or NESO, the National Energy System Operator, as it is today – is responsible for ensuring the balance of supply and demand across the country. Traditionally that task has required 'dispatchable' power stations – typically burning gas – which can ramp up supply to meet demand. Demand peaks in the evenings and in winter.

But decarbonising our electricity supply means a fundamental change; one which illustrates the general antipathy of Net Zero to freedom and prosperity. Renewable energy is intermittent: the wind does not always blow and the sun does not always shine. Decarbonisation will require the electrification of the whole of our lives, including heat and transport. That will require both a massive increase in generation capacity and also much more grid infrastructure, the delivery of which is impractical. There is and will be too little biomass and hydroelectric gen-

eration. Nuclear is not dispatchable. That means our future energy system will not always be able to meet demand.

The consequences of Net Zero are therefore profound and often absurd. Illustrating the need for gas in his speech, Mr Holliday explained that average winter demand for gas is about four times that for electricity, so, even allowing for 'a huge penetration of electric heat pumps', to decarbonise heating, the UK would need to build an additional 45 nuclear power stations. These would be used only six or seven weeks of the year. As he said rather conservatively, it would be a huge waste of capital.

This means NESO and the distribution network operators must move demand for electricity away from peak periods. They intend to do this through smart meters and pricing, but when those incentives are insufficient, consumers will be forced to switch off. That is why Mr Holliday said, 'Families will have to get used to only using power when it [is] available'.

Smart meters – now in a second-generation design (SMETS2) – allow half-hourly settlement and variable pricing. By offering cheaper electricity at off-peak times, suppliers hope to make evening peak loads manageable. Yet experience elsewhere suggests consumers often resist time-of-use tariffs because occasional high prices create unpredictability. Government mandates – such as for EV chargers – attempt to compensate, but people will resent losing control over when and how they use power.

For EV charging, multiple 7-kW chargers⁵ in one neighbourhood will overload wires in the early evening. In the short term, distributors can install monitoring in substations and ration charging, dividing supply equally among connected chargers. Later, smart home solutions will confront users with steep prices during peak times, pushing them to charge off-peak. Wealthier customers will override these restrictions, while the less well-off will have to make do.

In cold weather, heat pumps draw substantially more power. Switching them off during evening peaks means that poorer people will be colder and then pay the price for catch-up heating later. Costly, complicated and intrusive solutions include heat storage tanks or overheating dwellings in the afternoon. Time-of-use pricing is meant to solve demand spikes absent dispatchable generation, but for the poor the choice will be either going cold or incurring steep bills.

Wind lulls can last weeks, especially in cold snaps. With carbon capture and large-scale battery storage prohibitively expensive, planners expect to ration demand directly via smart technology. Householders would see chargers, heat pumps and other appliances switched off remotely to promote grid stability. Meanwhile, reliance on complex digital infrastructure raises fears of catastrophic failure or cyberattack.

Who is to have priority if a local transformer approaches overload? Should certain users – perhaps doctors or the disabled – receive special treatment? Are higher prices fair if only the wealthy can afford them?

Our lives will be different, with our choices curtailed and prices driven higher. And not just in the consumption of power at home. We are to change what we eat and so on. This is a dramatic transformation in the way we live our lives and the way we are to be treated by the state. Instead of capital being deployed to best meet the preferences of the public, government will decide what you can consume and when.

The then UK Government Chief Scientific Adviser, and now Science Minister, Lord Vallance was straightforward on this subject when writing in *The Guardian* on 9 August 2021:⁶ ‘transformation is required at every level of society,’ he wrote, adding that ‘individuals, employers, institutions and international partners will need to work together to understand the trade-offs, agree compromises and seize opportunities.’ But it is not clear how.

The world has seen this kind of appeal before. Lord Vallance was calling for experts to plan a ‘whole-systems’ approach to transform all our lives. Somehow ‘we’ will be assessing, scaling and deploying technologies, tracking progress and investing to seed the industries of the future. Note the prescriptive approach, focusing on large-scale transformations and central impositions on industries and individuals alike. This is a vision of a planned society, not a free one, and we cannot pretend history has not shown how planned societies evolve and fail.

Net Zero is antithetical to freedom. It is anathema to the idea, both as we have commonly understood it and as it must be recovered if we are to have the growth necessary to avoid welfare states defaulting on their age-related spending commitments. Fiscal projections from the UK’s Office for Budget Responsibility show spending soaring above sagging revenues in our lifetimes: that implies default without spending cuts and economic growth.⁷ The approach adopted by successive governments – of higher spending, higher taxes and more regulation – is running out of road: we need freedom to prosper.⁸

The challenge of our age is how to promote prosperity for everyone, avoiding default on obligations to older people, but without enslaving a diminishing population of the young to their service, and all the while protecting the natural environment in a way that is reasonable and respecting the inheritance we leave behind.

Thankfully, we long since learned how to achieve these goals: freedom under law. Sweeping top-down impositions are neither necessary nor beneficial. Such measures are failing today as they have failed in the past, and they must be dispensed with in favour of institutions within which free processes of discovery can reveal how best to serve the interests of the public and the planet.

The scope of Net Zero policy

Adopted in 2015, the Paris Agreement tasks nearly every country with reducing greenhouse gas emissions to keep global temperature in-

creases 'well below 2°C'. Each participant formulates Nationally Determined Contributions (NDCs), which include timetables for decarbonising the energy sector, transport, industry, agriculture and so on. Wealthier countries are encouraged to support developing nations with finance and technology. The treaty relies on voluntary pledges, and thus lacks any enforcement mechanism. Moreover, it fails to address the profound political and economic implications of the cost of Net Zero.

Net Zero drives transformation across many facets of daily life and key sectors of the economy. This transformation implies major capital investment and state direction of public and private life across a wide field:⁹

- *Energy*: the goal is to shift from coal, oil and gas to decarbonised¹⁰ sources, such as solar, wind, hydro and nuclear. Of these, only hydro is dispatchable; intermittency is a growing problem.
- *Transportation*: electrifying cars and public transport could reduce emissions. Many governments plan to ban new sales of petrol or diesel cars within the decade. Insufficient charging networks and higher upfront costs of electric vehicles strain consumers. Heavy transport and aviation remain technically harder to decarbonise.
- *Housing and buildings*: a vision of retrofitting homes with insulation and heat pumps to cut energy use, eventually phasing out natural gas boilers, runs into a myriad of practical difficulties and great expense. Retrofitting may often be infeasible in older buildings.
- *Industry and manufacturing*: decarbonisation through hydrogen and carbon capture and storage (CCS) is unproven at scale and raises costs. The policy can therefore be expected to drive industry to other jurisdictions with 'carbon border adjustment mechanisms' only further raising costs.
- *Agriculture and food*: it is intended that methane emissions will be lowered by reducing livestock and improving feed, shifting di-

ets toward plant-based proteins and adopting precision-farming methods. Directives altering diets and approaches to livestock farming collide with personal choice, cultural norms, farming livelihoods and global food demand. The practicality of large-scale changes to agricultural practices and dining preferences – plus, in developing nations, ambitions – remains unclear.

- *Waste management*: the drive towards a 'circular economy' mandates recycling, composting and minimal landfill. Large-scale energy-from-waste plants and advanced recycling facilities are costly, and it is infeasible for lower-income regions to replicate the best European models quickly.
- *Lifestyle*: governments propose to encourage citizens to adopt 'low-carbon living' through, for example, buying fewer goods, traveling less by air and shifting to EVs or public transit. People have been encouraged to have fewer or no children.¹¹ Such top-down demands discount personal preferences, local conditions and real-world costs. Households will resist constraints and controls, particularly when forced to sacrifice family, freedom, mobility or comfort for uncertain environmental benefits.

Wide-ranging Net Zero policies pile up without consideration of feasibility or cost. The Paris Agreement's voluntary pledges make it easy for politicians to trumpet climate virtue, while citizens bear the brunt of expensive regulations and lifestyle restrictions later. Dismantling reliable energy infrastructure, banning conventional cars and retrofitting unfit housing all risk enormous social and economic upheaval.

The fundamental question remains unanswered: are these drastic measures worth the vast price people will have to pay, including through abandoning the principles of a free society, for planning?

The importance of liberty

With Net Zero reaching so far into all our lives, imposing mandates across so wide a field with such widespread support from politicians, officials and the public, it is necessary to ask if and why freedom is important. Does it matter if human life is subject to wide-ranging control and curtailment? Ought freedom to be defended, and by whom?

Scholars, politicians and practical people throughout recent centuries have generally agreed that, yes, freedom matters very much. But they have not been good at defining the term and following through the implications, particularly throughout the past century of interventionism.

Over the past half century, it seems to have fallen to economists to defend freedom in the first instance, usually on the basis of the utility of free markets in providing increasing prosperity. But alas, today the case for increasing prosperity is under siege from environmentalists, who seem not to appreciate the capacity of humanity to expand resources in a finite world: overcoming scarcity is very much the point of cooperation in a free system of society.

With just a few noble exceptions,¹² lawyers have ceased to defend freedom. Bound as they are by their knowledge and application of the law as it is, they seem unable to observe that legislation and regulation are leaving a perpetually shrinking scope for individual freedom.

Contemporary legal systems, despite their ostensible commitment to the rule of law, increasingly function as instruments of authority over expressions of impartial, stable principle. Society is no longer governed by laws in their classical sense – general, abstract and spontaneously evolved norms – but instead by the discretionary power of legislators, bureaucrats and regulators.

Rules and regulations are only an expression of that power. One need only reflect on the

rule-making power of the UK Government's arms-length bodies to know that it is true.

This shift marks a return to rule by authority, in which the personal judgments and preferences of lawmakers – but more often officials – dictate outcomes under the guise of legality. Laws and regulations have become tools of control, easily manipulated or replaced by those in power, undermining both individual freedom and legal certainty. The modern legislative state thereby disguises arbitrary power behind a façade of democratic procedure, eroding the very foundations of the rule of law. As Bruno Leoni wrote in *Freedom and the Law*,

Machiavelli himself would not have been able to contrive a more ingenious device to dignify the will of a tyrant who pretends to be a simple official acting within the framework of a perfectly legal system.

How did such a system arise? The consensus among political scientists and politicians has long been that the purpose of politics is to engineer society. In this model, people are to be manipulated and directed as technicians operate their machines. It is true that political scientists and politicians *could* conceive of politics as a technique for maximising liberty, but this is not what we see with Net Zero and climate alarmism, which emphasise the tendency towards technocratic manipulation of the public.

In such a sorry pass, we ought to be clear that freedom is important and that it is all these things: a political, legal and economic concept fundamental to our prosperity, our culture, our moral development and our happiness. The long upward arc of civilisation has shown liberty to be the fountainhead of human flourishing, most acutely through the occasional interruptions to human progress provided by tyranny of varying degrees of absolutism.

That absolutism has been justified on myriad spurious grounds, such as iron laws of history,

class hatred, racial hatred and pursuit of justice as equal outcomes for different groups of people. Climate alarmism appears to be no more than the latest way to legitimise the wielding of power over others. Today as ever, we ought to ask if this is conducive to a life well-lived.

Freedom and a life well-lived

What is a life well-lived? Does the answer not begin by acknowledging that reasonable people will disagree? Individuals, couples and families will have different and changing preferences for how they spend their time and resources, and to what ends. Those preferences will change and be discovered. Does anyone have a right to constrain and direct that process where it does not harm others? If someone believes that others ought not to be free to pursue their ideal of a life well-lived, let them make the case.

From the writings of John Locke and Frédéric Bastiat to the modern works of Nobel laureates Friedrich Hayek and Milton Friedman, classical liberal and libertarian scholars have maintained that individual freedom under law is indispensable for human well-being. Far from being an abstract ideal, liberty is the practical framework within which people live safely, grow in virtue, build communities, advance their work in the service of others, and seek joy. By examining how liberty enables and fosters these fundamental dimensions of life, we see why so many have argued for liberty's primacy as both a moral imperative and a social necessity.

Liberty under the rule of law

Liberty does not mean anarchy. On the contrary, freedom requires a stable rule of law to protect life, property and personal rights. Classical liberals hold that the role of government is to maintain justice and peace, ensuring that no individual or group can aggress against others. In John Locke's view, citizens delegate to the state a limited power to enforce contracts and punish wrongdoing.

This arrangement not only secures people from violence but also fosters a culture in which virtue can flourish. When laws are transparent,

stable and applied equally, individuals feel safe enough to plan for the future, invest in their communities and trust their neighbours. Moreover, the freedom to act morally has real significance only when backed by the assurance that wrongdoing will be held to account. Thus, a system that upholds liberty under law preserves social order, enabling each person to live without perpetual fear of sudden aggression or arbitrary rule.

Identity and moral agency

Freedom is central to the formation of our identity. When no external power dictates our beliefs, associations or ways of life, we gain room to explore and grow as moral agents. Virtue itself implies the capacity to choose rightly over wrongly: if external imperatives force us into 'proper' behaviour, we cannot meaningfully claim virtue at all.

As John Stuart Mill argued, individuality is cultivated when people can test their ideas through action, discovering both personal truths and common ground with others. This creative process of self-definition underlies moral responsibility. To develop a conscience, we must weigh decisions and accept their consequences.

In short, liberty is what allows us to become who we truly are, shaping our character in ways that no system of compulsion could replicate.

Community and social bonds

A free society is parodied when described as one atomised, where individuals exist in isolation. Classical liberals argue the opposite: liberty is what nurtures thriving communities.

When people can choose their relationships and associations, they form bonds based on shared values, not impositions. As Alexis de Tocqueville observed, the most vibrant civic institutions – churches, clubs, charities – are products of voluntary participation. Freedom in this sense fosters an ethic of mutual respect: if we cannot coerce one another, we must persuade, cooperate and compromise.

This voluntary principle lowers social friction and fosters a deeper sense of belonging. By letting individuals unite around causes that speak to them personally, liberty ensures that communal engagement is authentic and robust, rather than hollow compliance with official mandates.

Work, opportunity and economic flourishing

A market economy is founded on property rights, voluntary exchange, prices, profit and loss. People are free to deploy their talents and capital in ways that best serve other people, in those people's estimation.

Such a system not only benefits the individual but also serves the needs of others. Entrepreneurs experiment with new goods and services. Employees develop specialized and more productive skills for higher wages. Consumers enjoy a wider array of options. Competition drives up productivity.

Adam Smith famously identified how the 'invisible hand' of the market channels self-interest into socially valuable outcomes. Yet that happens only if individuals have capacity to choose jobs, start businesses or invest resources without disruptive interference.

Consider the enormous prosperity generated by free trade and open competition, underpinned by abundant sources of energy of high quality. Societies that rest on economic freedom consistently outpace those that rely on central planning.

Joy and human flourishing

Human flourishing requires more than material comfort. It includes cultural expression, spiritual fulfillment, friendships and the opportunity to chart our own lives towards our own hopes and dreams.

As Deirdre McCloskey emphasises in *The Bourgeois Virtues*, freedom encourages ethical improvement alongside prosperity, enabling people to develop and deploy hope, faith, love, justice, courage, temperance and prudence. Without liberty, there can be no virtue and life's

journey as a process of becoming is curtailed.

The chance to explore diverse paths – whether in career, family life or art – allows people to find meaning and purpose beyond mere subsistence. Where governments micromanage choices, they inadvertently stifle the uniqueness that makes life rich.

Liberty thus stands as a foundation for joy, because it removes obstacles to self-direction and moral growth.

A life well-lived

For those of us who believe life has purpose higher than mere existence, it seems indisputable that liberty is not some optional accessory; it is the cornerstone on which rests our safety and security, our identity and morality, our relationships, our prosperity and our fulfilment. Whether elaborating natural rights, rebelling against tyranny, or making a utilitarian case for prosperity, the classical liberal and conservative tradition holds that each individual must be free to think, speak, act and innovate – provided they do not infringe upon the same freedom of others.

This balance of universal and reciprocal rights and responsibilities under a stable rule of law fosters societies in which virtue can thrive, economic opportunity can flourish, and individuals can pursue happiness in ways that are meaningful to them. In such an environment, we find not the chaos of unbridled license, but the promise of cooperation and the dignity of moral choice – proving once again that liberty is both a moral necessity and a practical framework for enduring human progress.

One wonders what the advocates of all-round planning and coercion in pursuit of Net Zero are thinking. What do the climate alarmists fear?

Liberty, survival and harm

Curtailed liberty is justifiable to save life and otherwise prevent harm. With hysteria so prevalent in the climate change debate – see Extinction Rebellion and Just Stop Oil – we must

confront whether the worst fears used to justify climate policy are correct.

Is climate change an existential threat?

Interviewed by Sophie Ridge on Sky News¹³ at a time of disruptive protests, Extinction Rebellion (XR) leaders said, 'Billions of people are going to die', 'We are facing a catastrophe', 'Life on Earth is dying' and 'Governments aren't addressing it.' Many similar statements were made. Are these claims true?

Categorically, no: those claims are not remotely justified by the official science – the periodic reports of the Intergovernmental Panel on Climate Change (IPCC).

Politicians rely on advice: they cannot be experts in every subject with which they may deal. For the system to be trustworthy, that advice must be impartial and objective. Alas that is too often not the case in relation to the climate. Politicians and policymakers need to start reading for themselves.

Environmentalist Michael Shellenberger explains in the introduction to his book *Apocalypse Never*:

I also care about getting the facts and science right. I believe environmental scientists, journalists and activists have an obligation to describe environmental problems honestly and accurately, even if they fear doing so will reduce their news value or salience with the public.

Much of what people are being told about the environment, including the climate, is wrong and we desperately need to get it right. I decided to write Apocalypse Never after getting fed up with the exaggeration, alarmism and extremism that are the enemy of a positive, humanistic and rational environmentalism.

Every fact, claim and argument in this book is based on the best-available science, including as assessed by the prestigious Intergovernmental Panel on Climate Change (IPCC), Food and Agriculture Organization of the United Nations (FAO) and other scientific bodies. Apocalypse Never defends mainstream science from those who deny it on the

political Right and Left.

Shellenberger makes exploring that Sky interview with XR the theme of the introduction to his book. On page 15, he writes,

Anyone who believes climate change could kill billions of people and cause civilizations to collapse might be surprised to discover that none of the IPCC reports contain a single apocalyptic scenario.

In 2022, the United States Congress passed legislation requiring the Department of Homeland Security to assess global catastrophic and existential threats. The first report was published in 2024.¹⁴ Professor Roger Pielke Jr summarised the report.¹⁵

The report found that asteroid and comet impacts, nuclear war and pandemics provided both global catastrophic and existential risks. There was insufficient evidence in relation to artificial intelligence and supervolcanoes. Climate change was found to present neither an existential nor a global catastrophic risk.

None of this is to ignore the serious implications of a changing climate: the report recognised the many significant consequences of climate change for people and ecosystems. But those risks were found to be local and regional, not global.

One would hope turning to the United Nations would reveal a phlegmatic presentation of the science as it should be correctly understood. Alas, no. When the IPCC released their latest major report in August 2021, the UN Secretary General said:¹⁶

Today's IPCC Working Group 1 report is a code red for humanity. The alarm bells are deafening and the evidence is irrefutable: greenhouse-gas emissions from fossil-fuel burning and deforestation are choking our planet and putting billions of people at immediate risk.

Pielke assessed the claim against the science,¹⁷ writing:

'Not only is this wrong, it is irresponsible. Nowhere does the IPCC report say that billions of people are at immediate risk.'

In the interests of brevity, we must leave it to the reader to satisfy themselves of the veracity of this claim by reading the references. Pielke, like Shellenberger, goes to some trouble to stand up for climate science and the IPCC, insisting climate science should be accurately presented. He is particularly critical of the implausible high-emissions scenario known as RCP8.5, which is ubiquitously used to drive claims of climate apocalypse.¹⁸ His work repays close reading to cut through the spin to the truth: even in relation to extreme weather, what the science says is not reflected in reporting.¹⁹

For our purpose of assessing whether climate change justifies urgent and wide-ranging impositions on human freedom, we need first answer the question of this section, 'Is climate change an existential threat to life on earth?'

The answer is a resounding and indisputable, 'no'.

Climate change and the harm principle?

If climate change does not represent an existential threat to life on earth – and it does not – does the harm principle justify present and proposed policy? To what extent does the production of carbon by individuals, families and businesses justify adopting a system of society in which the plans of technocrats routinely override the preferences of a free people?

We consider first the top-down global perspective before considering the bottom up-effectiveness of individual action.

The global perspective

Carbon dioxide emissions data is made available by the website Our World in Data.²⁰ It explains that, as the world develops and billions of people emerge from poverty, 'global emissions have increased rapidly over the past 50 years and have not yet peaked'.

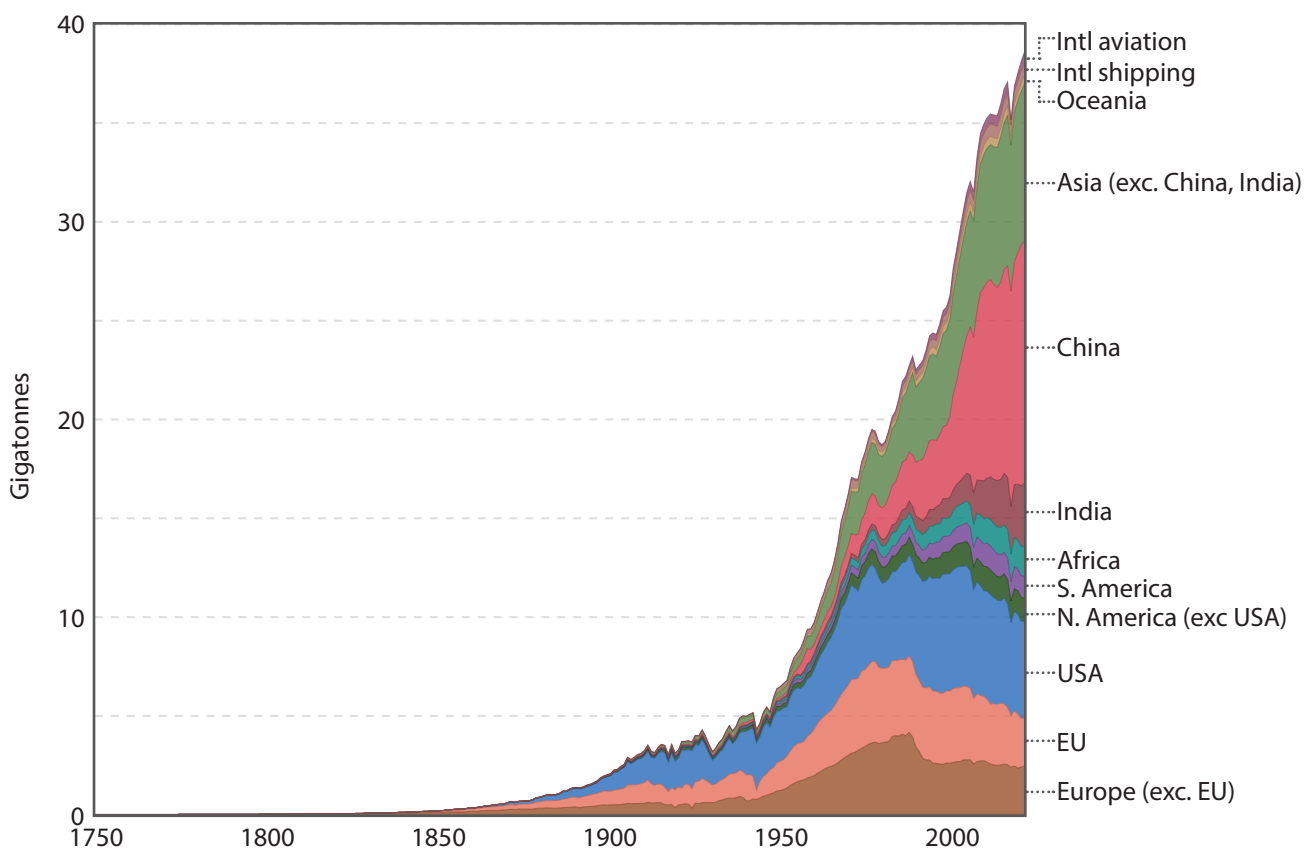


Figure 1: Annual carbon dioxide emissions by region, 1750–2024

Source: Our World in Data

On the latest available figures (Table 1), over 20 years, per-capita CO₂ emissions fell in the USA (–31%) and UK (–54%). They rose in China (+124%) and India (+123%) so that per-capita emissions in China are now about double, and those of India about half, levels in the UK. One might reasonably expect per-capita emissions in those giant countries to continue growing as they continue to develop.

Table 1: Per capita emissions, 2003–23

	2003	2023	Change	
	t/head	t/head	t/head	%
USA	20.7	14.3	–6.4	–31
China	3.7	8.4	+4.6	+124
UK	9.6	4.4	–5.1	–54
India	1.0	2.1	+1.2	+123
World	4.3	4.7	+0.4	+8

Source: Global Carbon Budget 2024, via Our World in Data.

Turning to total emissions (Table 2), China now dwarfs the USA at 11.9 billion tonnes to 4.9 billion tonnes. In the same year, the UK emitted 0.3 billion tonnes, about 2.5% of China’s emissions and about 6% of US emissions.

Table 2: Emissions, 2003–23

	2003	2023	Change	
	Gt	Gt	Gt	%
China	4.8	11.9	+7.1	+146
USA	6.0	4.9	–1.1	–18
India	1.1	3.1	+2.0	+187
UK	0.6	0.3	–0.3	–47

Source: Global Carbon Budget 2024, via Our World in Data.

Between 2022 and 2023, China’s emissions grew by 0.5 billion tonnes, more than the UK’s total emissions of 0.3 billion tonnes (Table 3), which contracted by 3% over the same period.

What can we conclude? In a world where the annual increase in Chinese emissions is more than the UK total, even complete decarbonisation

of our economy – which XR wanted by 2025 – would have an inconsequential effect. From the perspective of global emissions, it is inconceivable that any policy in the UK founded on harm to others would be appropriate.

Table 3: Emissions, 2022–23

	2022	2023	Change	
	Gt	Gt	Gt	%
China	11.4	11.9	+0.5	+5
USA	5.1	4.9	–0.2	–3
India	2.8	3.1	+0.2	+8
UK	0.3	0.3	–0.0	–3

Source: Global Carbon Budget 2024, via Our World in Data.

The implications of individual action

People rightly care very much about the climate and want to take action. There is no question that people are entitled to adjust their choices to reflect their preference to emit less greenhouse gases. The question is whether people should be compelled to take those actions.

In his book *False Alarm*, Bjørn Lomborg ranges across the changes we might make to our lives: recycling, eating less or no meat, taking public transport, flying less, using an electric car and having fewer children. He finds that even if we all take these actions, they make little practical difference.

Lomborg recounts the tale of when David Attenborough was asked what action he would take to prevent global warming and he replied he would unplug his mobile charger when not in use. Of course that would reduce carbon emissions: seven pounds a year, ‘less than one half of one-thousandth of the average emissions for a single person from the United Kingdom.’ Lomborg explains that charging is less than one percent of a phone’s energy requirement: the other 99% is related to manufacturing and the necessary infrastructure. Using the northeastern USA’s carbon trading system, that saving was worth 2¢ at the time of publication.

Lomborg draws similar conclusions across a wide range. If you live in a rich country, eliminating meat for the rest of your life would reduce your total personal emissions by about 2%. At the time of publication, that was the equivalent of \$1.50 in emissions trading. Electric cars make disappointing savings. Flying?

Even if every single one of the 4.5 billion people getting on any flight this year stayed on the ground and the same happened every year until 2100,

the rise in temperatures would be reduced by just 0.05°F, equivalent to delaying climate change by less than one year by 2100.

The fact is that insofar as there is harm in the emissions arising from our personal actions, changing our behaviour has an infinitesimal effect on climate change. There is no justification provided by climate change for using coercive power under the harm principle: it would be grossly disproportionate.

Central planning and state failure

'It is a revealing fact that few planners are content to say that central planning is desirable. Most of them affirm that we can no longer choose but are compelled by circumstances beyond our control to substitute planning for competition.'

– *The Road to Serfdom*, F.A. Hayek

When he wrote 'transformation is required at every level of society' in the *Guardian*, the then Government Chief Scientific Adviser Patrick Vallance was advocating wide-ranging change directed by the state: a revolution. He was advocating for central planning of the economy and society across the wide – one might say total – field set out above. It is a proposal for planning forced upon us by climate change.

The idea of rationally planning the development of society to meet collective goals has a long history of experimentation and failure under the name 'socialism'.

Planned societies

In *Socialism: The Failed Idea That Never Dies*, economist Kristian Niemietz critically examines the historical attempts to implement planned societies around the world, highlighting a recurring pattern: initial enthusiasm followed by economic decline and then authoritarianism. Despite these outcomes, the appeal of rational, planned societies endures, often due to the belief that previous implementations were not 'real socialism'. Niemietz delves into several case studies to illustrate this phenomenon:

- *The Soviet Union under Stalin*: The Bolshevik Revolution of 1917 aimed to establish a classless society in Russia. Early Western observers, including intellectuals and politicians, lauded the Soviet experiment as a bold step toward social justice. However, the regime soon resorted to oppressive measures, including purges, forced collectivisation and the establishment of a totalitarian state. Despite these developments, many Western admirers rationalised the repression as necessary for the socialist project. Over time, as the extent of the atrocities became undeniable, supporters distanced themselves, claiming the Soviet model deviated from true socialism.

- *China under Mao Tse-Tung*: Mao's ascent to power in 1949 was initially celebrated by many as the dawn of a new socialist era. Programmes such as the Great Leap Forward and the Cultural Revolution were intended to rapidly transform China into a socialist utopia. Instead, they led to widespread famine, economic disarray and cultural destruction. Despite these catastrophic outcomes, some Western intellectuals continued to defend Mao's policies, viewing them as genuine efforts to implement socialism. As the failures became more apparent, defenders retracted their support, suggesting that Mao's China did not represent real socialism.

- *Cuba under Fidel Castro*: Fidel Castro's 1959 revolution was heralded by many as

a triumph of socialist ideals over imperialism and inequality. Cuba's advancements in healthcare and education were often cited as evidence of socialism's potential. However, these gains came alongside economic stagnation, political repression and mass emigration. While some admirers acknowledged these issues, they often attributed them to external factors such as the US embargo rather than inherent flaws in the socialist model. As Cuba's economic hardships persisted, the narrative shifted, with proponents arguing that Cuba's socialism was compromised by external pressures, not by the ideology itself.

- *North Korea under Kim Il Sung:* North Korea's establishment in 1948 aimed to create a self-reliant socialist state. Early visitors praised its apparent social cohesion and industrial progress. However, the regime's extreme isolationism, personality cult and human rights abuses soon overshadowed any initial achievements. Despite evidence of widespread oppression and economic failure, some foreign sympathisers continued to view North Korea as a misunderstood socialist experiment. As the regime's brutality became more evident, defenders claimed that North Korea's approach was a distortion of true socialism.

- *Cambodia under the Khmer Rouge:* The Khmer Rouge's rise to power in 1975 was initially seen by some as a radical attempt to implement agrarian socialism. Their policies aimed to eliminate class distinctions by forcibly relocating urban populations to the countryside and abolishing private property. This led to mass starvation, forced labour and genocide. While the brutality of the regime was evident, some observers initially downplayed reports of atrocities, viewing them as exaggerated or as necessary steps toward a socialist society. As the scale of the horrors became undeniable, the Khmer Rouge was denounced and their actions were labelled as a betrayal of socialist principles.

- *Albania under Enver Hoxha:* Enver Hoxha's Albania pursued a path of isolationist so-

cialism, breaking ties even with other socialist states to maintain ideological purity. The regime implemented strict state control over all aspects of life, leading to economic hardship and political repression. Despite the country's isolation, some foreign communists admired Albania's commitment to Marxist-Leninist principles. However, as the country's poverty and oppression became more apparent, it was dismissed as an aberration rather than a genuine socialist state.

- *East Germany under the Socialist Unity Party:* East Germany, established in 1949, was often portrayed by its leaders as a showcase of socialist success. The state invested heavily in industry and social programs. However, political repression, a lack of personal freedoms and economic challenges led to widespread dissatisfaction. The Berlin Wall became a symbol of the regime's need to prevent its citizens from fleeing to the West. While some Western leftists praised East Germany's social policies, the state's collapse in 1989 led to a re-evaluation, with many arguing that it had deviated from true socialism.

- *Venezuela under Hugo Chávez:* Hugo Chávez's rise to power in 1999 was celebrated by many as a resurgence of socialism in the 21st century. His policies aimed to redistribute wealth and reduce inequality through extensive social programs funded by oil revenues. Initially, these efforts led to improvements in literacy and healthcare. However, over time, economic mismanagement, corruption and a decline in oil prices resulted in severe inflation, shortages of basic goods and political unrest. Supporters often blamed external factors, such as economic warfare by foreign entities, for these issues. As conditions deteriorated, the narrative emerged that Venezuela's experiment was not true socialism but rather a distortion caused by internal and external challenges.

A consistent theme

Niemietz's analysis reveals a consistent pattern: socialist experiments in planned societies begin

with high ideals, and garner significant support, but they lead to economic inefficiencies and authoritarian practices. When these projects fail, proponents often distance themselves, asserting that the failed state did not represent 'real socialism'.

This cycle contributes to the enduring appeal of planning, as each new attempt is viewed as distinct from its predecessors, perpetuating the belief that true socialism and rational planning has yet to be tried.

Why should we believe that things will be different this time?

Why planned societies always fail: the fatal conceit

Among others, Friedrich Hayek, Ludwig von Mises and Jesús Huerta de Soto have demonstrated conclusively that economic planning is inherently unworkable, with or without nationalisation. The successive failures of planned societies are not simply a matter of poor leadership or bad policy choices: failure is a consequence of the problem of knowledge in society.

That is, the information necessary to coordinate an economy is too vast, dispersed and dynamic to be successfully gathered and processed by any central authority.

The knowledge problem

Mises was the first to demonstrate that rational economic calculation is impossible under planning. In *Socialism* (1922), he explained that economic decision-making relies on market prices, which emerge through voluntary exchanges of private property. Prices serve as indispensable signals, allowing producers and consumers to allocate scarce resources efficiently. Under socialism, where private ownership is abolished, this process ceases to function. Without prices, planners have no rational way of determining what should be produced, in what quantities and by whom. Any attempt at economic co-ordination must therefore be blind, leading to shortages, surpluses and misallocations that compound over time.

Hayek extended this argument in *The Use of Knowledge in Society* (1945), showing that economic planning is not just inefficient but epistemologically impossible. The relevant knowledge that guides production and distribution is not static or centrally available but rather dynamic and dispersed across millions of individuals. Much of it is *tacit* – practical, local and context-specific information that cannot be transmitted to a planning board. Even if a central authority could somehow gather all the knowledge available at a given moment, it would be obsolete before it could be processed, as economic conditions continuously evolve.

Planning fails because it is always working with obsolete information, insofar as that information is available at all. The idea that contemporary technology in AI and data processing can solve these problems of economic planning is therefore a daydream.

Coercion and the prevention of knowledge creation

A fundamental but often overlooked consequence of economic planning is that it does not merely fail to gather existing knowledge – it actively *prevents* new knowledge from emerging. Markets are discovery processes, as Hayek emphasised. The interactions of millions of individuals, each pursuing their own ends, lead to the generation of new ideas, innovations and opportunities that no planner could have anticipated. But central planning replaces this dynamic process with rigid directives.

When the state controls industries, it decides in advance which technologies should be developed, what goods should be produced, and which methods should be used. This stifles entrepreneurial creativity, as individuals are no longer free to experiment, innovate or respond to emerging consumer needs. Planning, by its very nature, creates stagnation, and this can only be compounded by attempts to direct consumption in the name of climate mitigation.

The only alternative: a market economy directed by competition

The alternative to planning is not chaos but voluntary coordination through competitive free markets, prices, profit and loss. As Mises, Hayek and Huerta de Soto have shown, markets do not need to be *designed* – they emerge spontaneously through the interactions of individuals responding to price signals, profit opportunities and consumer demand. Property rights ensure that individuals bear the risks and rewards of their decisions, leading to better resource allocation and continuous innovation.

Economic planning is not limited to explicitly socialist economies; it also applies to heavily regulated sectors such as banking, energy and transport. When government intervenes – whether through explicit direction, subsidies or extensive regulations – it distorts incentives and prevents market solutions from emerging. The response to these failures, unfortunately, is often *more* planning and greater failure, rather than a return to market principles.

The case against economic planning is not merely historical – it is contemporary and urgent. Wherever planning is implemented, it leads to inefficiency, stagnation and ultimately heavy coercion in a doomed attempt to make it work. The only sustainable alternative is a system based on private property, voluntary exchange and prices that reflect real preferences, knowledge and resources. Only such a system can coordinate human action effectively in a world of scarcity, uncertainty and dispersed knowledge.

Net Zero and planning

The global push for Net Zero embodies the same fundamental flaw that has doomed socialist economies and central planning throughout history: the attempt to coordinate complex economic and social systems through coercive state intervention rather than through voluntary market processes.

The Net Zero agenda, with its sweeping inter-

ventions in energy, transportation, industry, housing, agriculture and lifestyle choices represents a renewed attempt to plan the economy. It will fail for the same reasons that every centrally planned system has failed before it.

Net Zero policies require governments to dictate how entire industries function: which sources of energy may be used, what kind of vehicles people may drive, how homes may be heated, what industries may produce and even what people may eat.

These decisions are made in ignorance of the real-world knowledge held by individuals, firms and entrepreneurs, and without their ability to adapt to changing conditions. Decarbonisation planners assume they can replace the spontaneous, voluntary decisions of free individuals with top-down directives, but this is a fatal conceit. The lack of reliable energy storage solutions, the unpredictable costs of retrofitting homes, the unintended consequences of restricting meat consumption, and the practical limits of electrifying transportation all demonstrate the impossibility of their task.

For instance, governments are now mandating the elimination of fossil fuels in favour of wind and solar power. Yet these energy sources are intermittent and unreliable, requiring massive subsidies and backup systems that hide true costs and distort capital allocation. Without a market-determined price system, planners cannot objectively assess whether their policies are leading to efficiency or waste. The same holds true for electric vehicles, which are being imposed on consumers despite inadequate infrastructure and questionable environmental benefits. The state's intrusion into production and consumption decisions distorts market signals, leading to wasteful investments, supply chain disruptions and economic inefficiency.

The logic of planning necessitates further intervention to correct the problems it creates. The push to decarbonise industry raises production costs, leading firms to relocate to jurisdictions with fewer restrictions. This prompts govern-

ments to impose 'carbon border adjustment mechanisms' – effectively new tariffs – to compensate. Instead of acknowledging that their policies are unworkable, planners respond with more coercion, further distorting the global economy.

In this way, Net Zero becomes a self-perpetuating downward spiral of regulation and control, mirroring the economic failures of centrally planned socialist economies.

How planning for Net Zero is failing

The scale of state intervention required to implement Net Zero makes it inevitable that it will produce the same categories of failure that plagued socialist economies.

Consider the economic and social consequences already emerging:

- *Energy shortages and price volatility:* Net Zero policies have already brought us close to blackouts, gas shortages and skyrocketing energy prices. European governments that shut down coal plants have been forced to restart them in response to energy price crises.
- *Bureaucratic chaos and inefficiency:* As seen in failed socialist economies, Net Zero is creating a complex web of regulations that conflict with one another, leading to endless policy reversals. Governments subsidise renewables, promising rapid decarbonisation, and then are forced to subsidise fossil fuels in an attempt to correct the resulting problems.
- *Suppression of personal freedom:* Just as socialist states sought to control every aspect of life, Net Zero policies seek to regulate housing, diet, transportation and even family choices. The push to limit air travel, encourage lower birth rates and dictate lifestyle changes is a direct assault on individual autonomy.
- *Massive misallocation of resources:* Vast sums are being poured into projects with no clear economic rationale, from inefficient offshore wind farms to unproven hydrogen and

carbon capture technologies. As in planned economies, these investments will eventually be revealed as wasteful and unsustainable.

Net Zero retreads the abandoned road

Net Zero is not merely an environmental policy; it is an attempt to centrally plan entire economies on an unprecedented scale. It requires the same mechanisms of state control that have consistently failed in planned economies: the abolition of free-market prices, the replacement of spontaneous order with bureaucratic decree, and the suppression of entrepreneurial discovery.

Mises, Hayek and Huerta de Soto have shown that economic planning is always doomed to fail, not because of bad intentions but because of problems of knowledge, which remain impossible to solve even with today's technology:

- It is impossible to obtain, store and process the vast amount of practical information in the minds of different people.
- Most of the necessary information is subjective, practical, tacit and non-verbal; it cannot be transmitted.
- Information that people have not yet discovered or created and which arises from the market process cannot be transmitted.
- Coercion – that is, regulation – prevents the discovery or creation of the necessary information.

Net Zero promises central planning of economic activity and will suffer the same fate as previous attempts: economic inefficiency, technological stagnation, growing authoritarianism and ultimately, social and political collapse. If we wish to address environmental challenges successfully, without undermining prosperity and freedom, the only viable path is one based on property rights, free markets and voluntary innovation. The alternative is inevitable failure.

Net Zero policy and human flourishing

Real-world consequences of Net Zero

Over the past few years, several analyses – particularly those from Net Zero Watch (NZW) and the Global Warming Policy Foundation (GWPF) – have raised concerns about the real-world impacts of Net Zero policies on personal liberty and economic well-being. Publications such as *Smart Homes and Energy Rationing* and *Net Zero Challenges* detail how top-down mandates risk subordinating individual choice to central directives. These studies note that rapid energy transitions demand:

- *Extensive grid overhauls:* Electrifying transport (via electric vehicles) and heating (via heat pumps) requires far more robust distribution networks. In practice, this entails massive public expenditure, infrastructure projects subject to political whim and the likelihood of forced load-shifting for consumers (for instance, restricting EV charging during peak hours).
- *Large subsidies or forced consumer interventions:* Without dependable baseload power or scalable storage solutions, policymakers often resort to subsidising intermittent renewables, imposing levies on conventional energy or compelling households to retrofit dwellings. These costs raise utility bills, constrain household budgets and shift wealth from lower-income consumers to politically favoured sectors.
- *Mechanisms that reduce consumer choice and misallocate resources:* Government-directed decarbonisation too frequently neglects local variation and market-based discovery. The result can be large sums poured into questionable projects – such as ambitious offshore wind farms with inadequate grid capacity to deliver their output to market – driving up the overall cost of energy. In practical terms, families end up with fewer viable options for heating, driving or simply running everyday appliances.

Such policies, while presented as necessary for environmental goals, infringe heavily on private decision-making. They illustrate fundamental questions about the balance between collective ambitions and personal autonomy.

These interventions are the consequence of structural failures. We are shifting towards a renewables-based power system that no longer operates through market dynamics. Once you divorce the price mechanism from supply and demand in energy, output no longer responds to scarcity and prices no longer reflect underlying reality. At that point, the system becomes administratively managed, not market-driven: developers build only when the state guarantees returns. If energy stops being a commodity governed by voluntary exchange and becomes a planned sector, everything downstream becomes more rigid, more politicised and less efficient. This is not just a technical upgrade; it is the reconstitution of the system's entire coordinating logic.

How Net Zero infringes liberty

The transformation pursued under Net Zero affects people's freedom along several dimensions:

1. Property rights and the freedom to contract

- *Land use:* Large-scale wind and solar farms frequently require compulsory purchase orders or planning overrides, limiting what landowners can do with their property. In some cases, farmland is diverted to energy infrastructure, transforming rural communities without adequate input from local stakeholders.
- *Building retrofits:* Upgrading millions of older buildings to meet strict emission-reduction targets (for instance, through improved insulation or, prospectively, mandatory heat pumps) will impose prohibitive costs and untenable logistical burdens. Where subsidies

do not cover the full outlay, homeowners end up bearing expenses they did not consent to. Worse, regulations might penalise households that fail to comply, effectively curtailing their property rights.

2. Autonomy

- *State-led transformation:* Mandating electric vehicles by a certain date or enforcing the installation of heat pumps removes the freedom to choose among different energy options (natural gas, hybrid systems, etc). Not all regions or households can feasibly adopt these technologies, yet national deadlines and uniform rules ignore real-world constraints such as geography, building design and the owner's finances.
- *Centralized demand management:* *Smart Homes and Energy Rationing* warns of forced load management, where providers (often under government mandate) can remotely curtail energy use. This extends beyond EV chargers to other household appliances, diminishing personal control over day-to-day routines.

3. Financial burdens

- *Hidden taxes and subsidies:* Funding large-scale renewables often requires levies on electricity bills or taxes on conventional fuels. Households pay higher prices, heavily subsidising 'green' industries. Low-income families feel these impacts most acutely, reducing their disposable income and hindering social mobility.
- *Constraining household budgets:* As energy and transport become more costly or restricted, families must sacrifice other priorities – education, healthcare, leisure – to cover the rising cost of essential services. Governments argue that these changes spur the necessity of greener lifestyles but they sidestep the ethical question of whether it is right and proportionate to impose such burdens on unwilling citizens.

Erosion of moral agency

Crucially, Net Zero mandates do not merely alter infrastructure or price signals; they reshape the moral landscape in which people make decisions.

In Lord Acton's view, genuine virtue can only flourish in the space where individuals are free to choose between right and wrong. Deirdre McCloskey likewise stresses that ethical qualities emerge in an environment of voluntary exchange and personal responsibility.

- *Displacing conscience with directives:* When government dictates which heating systems one may install or which vehicles are permissible, moral responsibility shifts from individuals to the state. Citizens no longer act out of conscious reflection on environmental impact; they simply comply with mandates or face penalties. This dynamic undercuts the very essence of moral agency: the ability to exercise independent judgment.
- *Undermining entrepreneurial judgment:* Net Zero policies inevitably hamper the free discovery process that occurs when producers and consumers communicate through market prices. Jesús Huerta de Soto argues that entrepreneurship – the creative act of spotting and meeting unmet needs – thrives only when individuals make choices within a framework of private property and the rule of law. Overly rigid climate-related directives smother that spontaneity, leaving fewer opportunities for innovative solutions that could emerge from genuine competition.
- *Promoting a culture of fear and hopelessness:* the relentless and unjustified emphasis on 'climate crisis' with which we live breeds a sense of doom, encouraging people to believe that no solution short of total central control can avert disaster. This environment stokes anxiety rather than rational engagement. Policymakers buoyed by alarmist rhetoric justify draconian measures, behaving as if survival depends on surrendering individual autonomy. The result can be social passiv-

ity: a populace too demoralised to question whether top-down diktats actually work or whether they trample freedom and unnecessarily constrain flourishing.

By presenting every personal activity – from driving to heating one’s home – as a potential threat to global well-being, proponents of broad Net Zero mandates cast individuals as guilty until proven ‘green’. This cultivates guilt instead of moral courage and voluntary stewardship. People are bound to feel they have no agency and can no longer play a positive role in protecting the environment through responsible, freely chosen actions.

Net Zero policies that rely heavily on government planning, forced demand management and uniform technology mandates infringe the liberties that underpin human flourishing. By weakening property rights, imposing punitive financial burdens and shifting moral responsibility from the individual to the state, these measures erode the cultural and ethical foundations of a free and flourishing society.

A more balanced approach, rooted in innovation, market discovery and respect for personal agency, would not only preserve essential freedoms but also be more likely to promote genuine environmental improvement in the long run.

Reducing emissions while promoting human flourishing

Externalities: understanding carbon emissions

Economists commonly frame climate change as a textbook example of a global externality: when power stations and factories burn fossil fuels or cars emit carbon dioxide, it may be the costs of those emissions are not fully reflected in the price of products or services, potentially leading to overproduction of carbon-intensive goods. Mainstream theory calls for internalising this externality – most simply by pricing emissions – so that it is borne by producers and consumers.

How to accomplish this without imposing draconian central controls is hotly debated. Alarmist narratives have driven ill-considered regulation and produced failed top-down approaches, including expensive renewable power mandates, which raise energy bills, disrupt industries and erode freedoms. Cost-effective, incremental transitions should take into account the practical constraints of energy systems and public behaviour.

The crux of the externalities debate is not whether there is some justification for action – the classic harm principle can apply if there is

real damage to third parties – but how best to structure that action. Poor regulations create distortions, disincentivise innovation and shift wealth unjustly.

A market-oriented approach seeks to avoid these pitfalls by aligning individual incentives with the broader goal of emission reductions.

Market-based approaches

We have explored history’s repeated experience of command-and-control policies. Heavy subsidies for renewables and outright bans on fossil fuels fail to reflect the complexities of infrastructure, economics and consumer preference. A better way forward requires guiding of investment, through honest prices, profit and loss in properly functioning markets.

The guiding principles for reform should include local adaptation, private-sector initiative and modest public interventions, limited to where markets cannot straightforwardly manage externalities.

Officials setting out to plan interventions cannot predict technological developments or the preferences of millions of households. Instead, clear and limited signals – such as a moderate

carbon price or a well-structured technology-neutral policy framework – should inform businesses, entrepreneurs and communities to find the best route to lower emissions.

Innovation, price signals and practical solutions

Two notable voices in climate debates, Bjorn Lomborg and Michael Shellenberger, offer concrete suggestions that align with free-market principles. Both advocate that innovation, competition and moderate state involvement – mostly in R&D – can be more fruitful than sweeping regulatory interventions.

Targeted R&D funding

Lomborg argues that governments should significantly boost spending on research and development for low-carbon technologies. But instead of lavish subsidies aimed at propping up existing technologies regardless of cost-effectiveness, funding should focus on breakthroughs that slash emissions at competitive prices – whether in next-generation solar, nuclear, carbon capture or alternative fuels. Innovations emerging from R&D hold greater potential for global adoption than do artificially enforced renewables, because low-cost green tech is more appealing to both affluent and developing nations.

Nuclear power and energy diversification

Shellenberger underscores nuclear energy's reliability and minimal land footprint. Unlike intermittent renewables, nuclear power can deliver stable baseload without emitting CO₂. He contends that liberalising regulations – rather than piling on subsidies – would encourage private firms to test advanced reactor designs and reimagine plant safety. Diversifying energy sources through a combination of nuclear, natural gas and an array of renewables without subsidy can sustain grid stability far better than reliance on intermittent power alone.

Realistic carbon pricing

Lomborg recommends moderate, well-calibrated carbon taxes or markets for carbon permits,

aligning private incentives with the real cost of emissions. However, both Lomborg and Shellenberger stress that carbon pricing should not be set so high as to strangle the economy. Instead, it should be geared toward nudging behaviour and innovation, leaving room for the organic adoption of new technologies without heavy-handed economic planning.

Decentralised experimentation and local best practices

A core principle of free-market environmental policy is that no single solution fits all. Even in countries with advanced infrastructure, the energy mix varies greatly by region. Urban centers might integrate electric vehicle charging stations easily, while rural zones could find them impractical. Offshore wind may be ideal on coastlines, but mountainous areas might benefit more from small-scale hydro or micro-nuclear systems.

Thus, policy should encourage decentralised pilots: municipalities, private firms or local cooperatives can test microgrids, advanced nuclear or hydrogen-based systems in controlled environments. Transparent cost-benefit analyses would reveal what truly works, building public confidence in the solutions. If an approach proves cost-effective, its success should spread naturally, spurred by the profit motive and consumer satisfaction rather than forced rollouts.

This emphasis on local discovery also mitigates the knowledge problem identified by Hayek: rather than bureaucrats guessing which technologies will succeed, myriad actors across regions can experiment independently, generating valuable insights for wider application without central direction.

Civil society, social norms and the case for free market policy

Beyond technology and prices, cultural and social norms can help reduce emissions without coercion. Campaigns for recycling, carpooling or efficient home insulation have been effective in shifting behaviours in many communities.

Philanthropic efforts and non-profit sector initiatives can likewise accelerate adoption of decarbonisation. When environmental progress is framed as a moral, community-oriented choice – rather than a mandated directive – people are more likely to engage sincerely.

Such voluntary cooperation preserves moral agency: individuals make meaningful decisions about resource use, enabling them to develop virtue and responsibility. This approach resonates with the classical liberal view that genuine moral conduct arises where people choose the good without being compelled. In a free society, social norms evolve from grassroots action, spurred by information, peer influence and personal conviction – precisely what fosters social cohesion and genuine commitment.

Summary

A free market approach to carbon reduction acknowledges that climate change may be a

pressing challenge but asserts it does not warrant top-down direction of capital, unaffordable subsidies or blanket prohibitions.

Instead, policymakers should harness incentives – be they moderate carbon prices or technology-neutral policy frameworks – to enable competition on the merits and consumer preference to determine how best to cut emissions. The goal should be to decentralise and thereby accelerate innovation, allowing localities to run small-scale programmes and adopt the most effective solutions. Civil society can also steer habits and norms through voluntary cooperation.

By placing liberty, innovation and transparency at the forefront, a free-market strategy offers a path to lower emissions that avoids the pitfalls of central planning and which is more likely to maintain public trust while defraying the risk of economic dislocation. Such a strategy should be adopted immediately.

Conclusion

Revisiting Vallance's 'revolution'

Lord Vallance's call for a 'transformation at every level of society' epitomises the belief that only sweeping top-down direction can meet ambitious Net Zero targets. This vision of an all-encompassing revolution mirrors past experiments in central planning: it underestimates the knowledge problem, overlooks local variation, and substitutes bureaucratic diktats for organic development. It is founded on the fatal conceit behind every authoritarian revolution: the pretence of knowledge.

Vallance's approach undermines freedom and is ultimately bound to misallocate resources. By sidelining voluntary cooperation and profit-and-loss signals, the approach stifles innovation, raises costs disproportionately and burdens lower-income households.

Proponents of these old, failed ideas often lean

on alarmist rhetoric to justify intrusive mandates, forgetting that neither fearful appeals nor state coercion can sustainably overcome the dynamic facts of the world as it is or the reality of the human condition. Vallance's revolution not only jeopardises liberty and prosperity but would prove unworkable even on its own terms, exposing precisely those failings that have doomed grandiose plans for revolution wherever they have been tried.

A way forward

The arguments in this paper show there is a better path: one that retains personal agency, leverages market processes and fosters genuine environmental stewardship. If Net Zero ambitions – or even ambitions for further material emissions reductions – are to succeed without morphing into authoritarianism and economic ruin, policy must respect liberty and responsibility.

By setting clear but modest price signals – rational carbon pricing or technology-neutral standards, for example – and creating space for entrepreneurship and local experimentation, societies can discover what truly works without imposing unaffordable, uniform solutions. Individuals, entrepreneurs and local communities – those best placed to adapt swiftly and creatively – can then deploy technologies ranging from microgrids to advanced nuclear, assessing outcomes through transparent cost-benefit analyses.

Civil society, meanwhile, offers a powerful channel for consensually shaping social norms and encouraging voluntary adoption of more environmentally-sympathetic lifestyles, sustaining moral agency and forging shared purpose.

Afterword: political failure and renewal

At the time of writing, it is increasingly clear that Net Zero is a political failure.

As the sheer scale of the costs of the revolution emerge, it has become untenable for the Conservative party to continue to offer its unequivocal support: indeed party leader Kemi Badenoch has recently signalled a change of direction. The Reform party had already expressed opposition. With dramatic spending pressures impinging on the Labour government, one can only wonder how long they can sustain policies of immense subsidy and central direction.

This moment marks an opportunity for intellectual, social and political renewal. Our vigorous democracy can pivot away from an overreaching state toward institutions that encourage transparency, competition on the merits, and choice founded on moral agency. By reaffirming

In freeing citizens to decide how best to reduce emissions, governments move away from blunt mandates and let decentralised innovation and cooperation flourish. This approach does more than deliver practical results: it preserves the moral and cultural frameworks upon which healthy communities and thriving economies depend.

Ultimately, such a balanced policy – respectful of human dignity and driven by competitive discovery – has the best chance of achieving effective, lasting environmental solutions. By combining individual freedom with wise stewardship, we can address climate challenges without abandoning the vital principles that make societies resilient, creative and free.

constraints on government power, policymakers can restore confidence that citizens' rights and best interests will be honoured, founding policy on ideas that work.

A freer society – rooted in Lord Acton's moral emphasis on conscience and virtue, and bolstered by the insights of the Austrian School of economics into dispersed knowledge and discovery – remains the surest route to enduring prosperity and flourishing. Through liberty, moral agency and competitive markets, we can address environmental concerns without succumbing to the mistakes that are inherent in planned societies.

Now and always, it is liberty, not forced revolution, that holds the promise of a better future for humanity and the planet alike.

Endnotes

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The Net Zero and Liberty project

This paper is the first publication in our series *Net Zero and Liberty*, which seeks to explain the development of political and economic liberty in the west has been inextricably linked to energy, and how decarbonisation policies threaten to erode many of our hard-won freedoms.

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For further information about Net Zero Watch, please
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